November 7, 2007

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Mr. Phillip Isenberg, Chair Delta Vision Blue Ribbon Task Force 650 Capitol Mall Sacramento, CA 95814

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Water and Business Delta Vision Stakeholders Comments on October 18, 2007
A Vision for California's Delta

Dear Chair Isenberg:

The undersigned represent business and water agency stakeholders on the Delta Vision Stakeholder Coordination Group. This letter provides our comments on this second draft Vision document.

General Comments on the Second Draft Vision Document

As with the first draft there is much to commend, yet there continues to be many deficiencies that should be corrected in a final version. The draft continues to provide the initial policy objectives for a Delta Vision as well as outlining in a general fashion how the Task Force's desire to have the water system and ecosystem be protected as co-equal values can be accomplished. Direct statements that new storage and improved conveyance must be constructed to capture water at least damaging times to the environment are strongly supported. However, the document needs to become more specific as to what type of storage and conveyance are most likely to assist in meeting the Task Force's objectives. Without such specificity, the Task Force's report does little to advance policy beyond the results of the CALFED program.

The draft continues to lack a logical basis for defining flow needs for a restored ecosystem. As we stated previously, an ecosystem design element needs to be defined prior to defining flows necessary to support the ecosystem. While progress was made in defining desirable ecosystem characteristics and functions and the paper produced by CALFED's Chief Scientist for the Vision process is a thoughtful and valuable guidance document, the draft's statements that we should expect reduced water exports in the future are not substantiated in the document from either a scientific or policy perspective. As stated by the Lead Scientist, Michael Healey, "...there is relatively little solid science on which to base a Delta flow regime." Calling for reduced exports while at the same time correctly calling for increased storage and improved conveyance to capture water at times least damaging to the environment and efficiently move it to areas of need is contradictory and internally inconsistent. At a minimum, the document should be revised to indicate that to produce less ecosystem stress, continuing as feasible to shift

¹ Healey, Michael, <u>Design Principles for a Sustainable Ecosystem in the Bay Delta – Ideas for Discussion.</u> October, 2007.

diversions from dryer periods to wetter periods is necessary and improved conveyance and storage are elements to help achieve that objective.

Reference to the Public Trust doctrine is made throughout the document. It should be noted that this doctrine does not give a priority to the protection of public trust resources. Rather, the doctrine provides that decision makers must consider the impact of water management activities on public trust resources and protect the public trust resources when feasible. "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors. The Public Trust doctrine is one that is designed to serve the public interest, which, as the Courts have explicitly stated, may entail taking action that is detrimental to the environment.

With respect to CVP and SWP operations, the figures and analysis needs to take into account water taken from the Delta when it is in surplus conditions versus water diverted to upstream storage and later released for conveyance through the Delta.

The document also utilizes a number of figures that are at best incomplete and at worst very misleading. In particular, Figure 5 Diversions in the Delta, Figure 7, Water Balance in Delta by water year type and Figure 9, Range of additional annual water for eight resource management choices, omit context necessary to viewing the information in perspective. We will address each below.

At a number of locations, the document states that the future of the Delta depends on reduced reliance on the Delta for water supply. There is no explanation as to the values being promoted by such a reduced reliance, any explanation of the degree or reduction necessary or technical analysis supporting this conclusion.

Specific Comments

Page 2, line 26. At its September meeting, the Task Force conducted a thoughtful discussion of the notion that water supply and the ecosystem should be coequal objectives. We recall the discussion concluding that rather than pose them as two coequal objectives to be balanced at some sub-optimal level for each, that rather the achievement of these objectives should be integrated. That is, that by recognizing unmet needs both in terms of ecosystem health and water supply for the state's growing population and economy, that both the ecosystem can be improved and the state's water supply for human uses be made more plentiful and reliable. We believe the draft Vision document should reflect this discussion.

Page 2 line 35. The line "The history of the Delta has been to secure water supplies first and then worry about environmental mitigation later" is inaccurate and pejorative. In the last twenty years, it has actually worked in reverse. As shown in the table below, between the Bay Delta Accord, the Central Valley Project Improvement Act, proposed San Joaquin River Restoration and recent federal court actions over two million acre-feet of yield has been reallocated away from the SWP and CVP for a variety of environmental

objectives. Given the continued decline in the status of some fisheries, it is foolish to believe more of the same without a more comprehensive action focusing on all ecosystem stressors is wise. Since the California Environmental Quality Act of 1972 and Clean Water Act of 1977, permits for diversion works have required analysis and mitigation of significant environmental impacts.

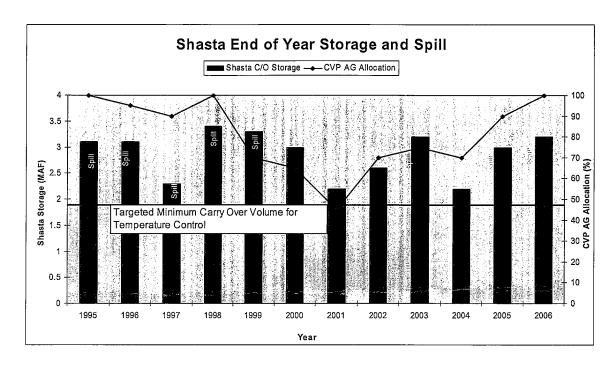
Actions Creating Supply Losses	CVP	SWP	Notes
1992- Enactment of CVPIA Sec. 3406(d) – Reallocated water from south-of-Delta CVP ag service contractors to Level 2 Refuge Supplies.	X		
1992 -ESA listing of Winter Run Salmon	Х	Х	
1993 - ESA listing of Delta Smelt	Х	Х	
1994- Bay Delta Accord. CVP and SWP contractors agreed to dedicate, on a temporary basis, water to Delta fisheries restoration. The Accord provided that management of CVP water under the Accord to be counted toward section 3406(b)(2) obligation. (For the CVP the Accord losses include the loss of CVP pumping obligation by the SWP).	X	X	
1997 - Implementation of CVPIA section 3506(b)(2) November 1997 and subsequent decisions prescribed management of section 3406(b)(2).	Х		
2000 Trinity River Record of Decision. Prescribes flow criteria	X		
2006 Proposed San Joaquin River Settlement. Prescribes flow criteria for San Joaquin River Restoration (2)	Х	Х	SWP loss is CVP 215 water to Kern; CVP is Friant Class II
Total Water Delivery Impact - long term average	700	200	
Additional Impacts of 2007 Wanger Decision (1)	200- 600	220- 1,530	SWP Table A and Article 21 water
Increases in SWP System Demands			
Filling of Diamond Valley Reservoir		850	initial fill - multi year, cycleable
Filling Kern Co. Water Banks		+- 3,000	initial fill - multi year, cycleable
LADWP Demand Increase - Mono Basin Supply Loss		100	
Colorado River Supply Loss		550	

⁽¹⁾ Outcome will vary based on application of court prescriptions and hydrology (2) Loss to FriantCVP contractors

Page 2 line 41. The document should also recognize that major diversions were permitted prior to CEQA and the Clean Water Act.

Page 3 lines 28-37. The sentence "We should also expect that water exports from the Delta will be reduced in the future" is entirely without context, scientific or policy grounding cited in the document. It would be correct to state that a preferable ecosystem restoration scenario might necessitate more flows, or flows in different patterns than exist today. The reverse could also be true. Since no definitive ecosystem design state has emerged, nor has a scientifically justified flow regime to support that design state, it is premature to make such judgment. Further, should an ecosystem design of choice require more flows, all flows into, diverted within and exported from the Delta should be evaluated as flow sources. We believe this ungrounded notion of needing to reduce exports comes in part from visceral reaction to Figure 5, Diversions from the Delta, which we discuss at length below. Put in proper context, export operations relative to total outflow, recognizing the context of recent export demands, a different picture emerges. This picture is one where export demands are stabilizing and moving toward a wet-year diversion mode versus dry year, despite conveyance limitations impeding that pattern shift. That some groups tend to loudly equate ecosystem health with reduced exports, i.e., the amount of water diverted, not the way it is diverted, should not simply be parroted here unless fully justified by science or reasoned policy.

An expectation that exports should be reduced conflicts with statements in the draft that new storage and conveyance must be constructed to capture water at times least damaging to the environment and efficiently move it to areas of need. Improved conveyance is the key to utilizing both existing storage and new storage, upstream and in export service areas. As shown below, from 1995 to 2006 Shasta Reservoir spilled water to meet flood control requirements in 8 of those 12 years. Due to inadequate capacity to move water through the Delta this water was lost to either human consumptive needs or directed environmental benefit. Yet in 9 of those same 12 years, water shortages were imposed on the Central Valley Project water users. This situation is analogous to having money in the bank and bills to pay yet the bank is often closed when you need your funds. The solution then is not for the bank to say "you shouldn't spend so much money". Similarly, saying we need to export less water makes no more sense in this context, especially when at the same time the document is saying "the bank should be open more hours and we should grow our accounts."



Page 3, line 39-45. Reducing reliance on levees and matching investments in levees to resource protection objectives are strongly supported. Sustaining the current levee configuration in the Delta is unaffordable and unrealistic in light of climate change and seismic safety concerns. A levee management policy of recovering from, rather than resistance to failure scenarios of all kinds (pg. 14, line 3) is clearly the sensible approach when coupled with efforts to separate vital water supply conveyance functions from vulnerable locations.

Page 5, line 37. The modifier "existing" should be removed from this sentence as is prematurely implies that exports will not increase in any circumstance or that if they do, their protection is unimportant.

Page 8, line 42. The various use of the term "delta" and "delta watershed" need clarification. For instance, when the draft says "Large populations outside the watershed are serviced by exported delta water" does "delta water" mean water taken directly from the Delta or water that is tributary to the Delta?

Page 9, line 6. The 4.4 million acre-feet per year California imports from the Colorado River is no more a modest amount of water than the 4 maf often pumped by the SWP in a big pumping year, especially considering that reductions of Colorado River supply must be made up elsewhere, which often means water conveyed through the Delta.

Page 9, line 9. The Delta is the dominant part of the State's developed supply inasmuch as up to 9 million acre-feet of water is conveyed by the State and Federal projects out of a total developed supply of 35 million acre feet (about 26%). Further, the correct figure of

the State's water supply that drains through the delta is 40-42 percent, not 15 percent.² Even at this correct percentage, given that a large portion of the States' water endowment is in protected north coast rivers, the water supply conveyed through the Delta looms as the most important source in the state, without parallel or substitute.

Page 9, lines 22-26. California's water system and Delta are in crisis. Proceeding in a staged manner as described in the Vision document is a prescription for failure and paralysis and repeats the mistakes of the past 40 years. It is abundantly clear that with court actions crippling the state's major water sources bold action must be taken to begin to restore system reliability. Action is needed reduce fishery impacts of export operations, which while scientifically debatable, have been found by the court to be unacceptable. We cannot wait for "widely agreed" performance standards to be developed then incrementally step forward with minor changes that we know have no hope of addressing fundamental conflicts. Further, the ecosystem can not wait to see natural flow patterns and extirpated habitat types be reintroduced in baby-steps. This is the failure of CALFED that must not be repeated. Instead, we recommend that the Blue Ribbon Task Force request that the State begin a project-specific EIR that would include the two alternatives as suggested by the Delta Vision Stakeholder Coordination Group. These options were distinguished by the form of conveyance, with one offering an armored water supply corridor through the Delta and the other an armored corridor with an isolated conveyance operating in tandem. A third option of a fully isolated facility could be included to provide full comparative performance value. A true alternatives analysis under CEQA will allow for the superior alternative to emerge.

Page 9, lines 28-38. This is a clear and proper statement of generally what is necessary and how a reconfigured system should be managed. It is also underpins the notion that bold steps, not incremental ones, are necessary. However, the sentence at line 34 "Designs for storage and conveyance should incorporate expectations of reduced water from the Delta…" lacks any stated scientific or policy rationale (see also comment at Page 3 lines 28-37, above). It is also unclear whether the statement refers to water diverted from the Delta or includes the Delta watershed.

Page 9, line 40. At this line it is pointed out that water use in the Tulare basin is mostly agricultural, implying that agricultural use is somehow less reasonable or beneficial than other uses. This qualifier is inappropriate.

Page 9, lines 43-45. While the State and Federal Projects could be considered to provide modest supplies of the total dedicated state water (about 26%) these are critically important base supplies for the State's economy, as noted by DWR Director Lester Snow in speaking before the Blue Ribbon Task Force on October 25th. It should also be noted that for many areas, these supplies constitute up to 100% of the water supply available. As such, current court imposed Delta conveyance limitations magnify shortages driven by hydrology, increasing shortages 15-35% over what they would have otherwise been.

² Water Education Foundation, <u>Laypersons Guide to California Water</u>. 2000 update. Pg. 3 (42 percent) and State of California, California Water Atlas, 1979, pg 104. (40 percent)

For example, many agricultural districts face receiving only a 20% supply or less this coming year due to the combination of hydrology and regulatory restrictions.

Page 10, line 38-42. The discussion omits the fact that the two largest recently constructed reservoirs were built for reasons apart from yield. Contra Costa's Los Vaqueros project was built to provide emergency supply and improve drinking water quality. Metropolitan's Diamond Valley Reservoir was designed to provide six months of emergency storage water in the event of an earthquake disrupting California aqueduct supplies, and to allow for conjunctive use of State Water Project supplies. To imply that yield is the only reason to build surface storage belies the facts borne by recent history. Major surface storage projects under consideration within the state all provide multiple benefits aside from yield.

Page 15, line 8-11. Capitalizing on conjunctive use opportunities in the Tulare Basin will require a reliable State Water Project supply base. Natural flows in this basin are nearly fully utilized, except in very wet years. The extensive existing conjunctive use activities in the Tulare Basin already rely on historical diversions from the Delta. The regulated supply provided by the SWP and CVP is an integral part of ongoing in-lieu groundwater recharge programs. The unregulated supply provided in the wetter periods is used to supplement local runoff for direct groundwater recharge and banking programs. Therefore, significant conjunctive use opportunities can only be achieved through assuring a reliable imported water supply.

Comments on Figures

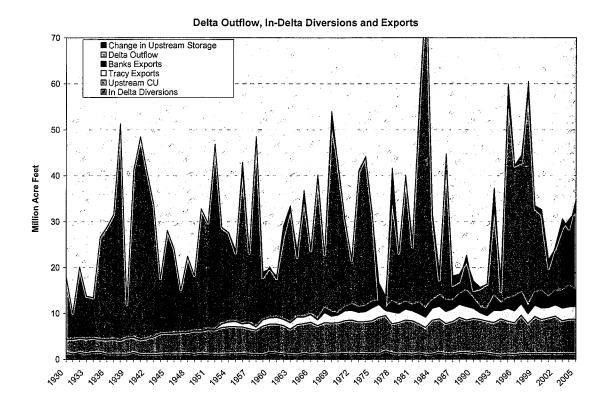
As noted above, Figures 5, 7 and 9 paint an incomplete and perhaps misleading picture of water management in California.

Figure 5, Diversions from the Delta, shows a set of statistics, skewed by the scale used and data omitted. It fails to enlighten the reader regarding the cause of increased exports and leads one to conclude that exports will be ever-increasing. Recent increases in exports are due to a host of factors affecting the State Water Project including:

- 1. Recent wet hydrology allowing for increased exports, along with greater outflow.
- 2. Filling of off-stream storage including Diamond Valley Reservoir and groundwater banks in Kern County, amounting to greater than 3 maf.
- 3. Loss of Colorado River supply, requiring annual increases from the Delta of about 0.55 maf annually, and
- 4. A tripling of demand by the City of Los Angeles on the Metropolitan Water District of Southern California to make up for loss of water formerly received from the Mono Basin. While Los Angeles' overall consumption is flat due to extensive conservation and recycling efforts in the face of increasing population, their dependence on Metropolitan and thus the Delta has increased.

While some of these increased demands remain with us, deposits to storage are temporary or cyclical.

Figure 5 also lacks critical context. Looking at diversions from the Delta without looking at corresponding Delta outflow during this period, upstream depletions and changes to Delta flows brought about by storage, provides an incomplete picture. The figure below is Figure 5 with those data added.³



By including Delta outflows, upstream consumptive use and changes from storage, a much different picture emerges. The relative magnitude of In-Delta and Export diversions is dwarfed by outflow in all but dry years and is roughly half the amount of upstream consumptive use in all years. In dry years, storage releases previously captured upstream in wet years provide much of the outflow supporting the Bay-Delta system. Contrary to statements in the report, these data also show that export diversions often decrease in dryer years and that current operations capture wet-year water for dry year use and environmental flow. More storage and better conveyance could assist this trend and address low flow years in which the biological and water supply systems are clearly stressed, without significantly reducing outflow in wet years.

Figure 7 also omits key benefits provided by storage. In the wet year of 1998, 2.6 maf was diverted to storage. In the average year of 2000, 1 maf of storage releases supported exports of 6,321 maf and Delta outflows. In the dry year of 2001, export volumes and outflow were supported by 1.9 maf of storage releases. This is water that would have been otherwise unavailable to support either outflow or exports.

³ Upstream consumptive use includes groundwater and soil moisture sources.

Figure 9 is an oft-cited Figure which is both out of date and misleading. While water conservation is a vital component of a water management portfolio, and we support that all available cost-effective conservation measures must be pursued concurrent with Delta improvements, many of the tactics comprised in the "high estimate" of conservation savings potential cited in this figure lack real-world credibility. Many actions necessary to achieve the high estimate have been acknowledged to be neither cost-effective nor feasible. Many of these actions would also rely on individual water users' estimation of what is cost-effective or feasible for them in reference to their cost of water and power utilities. They are not cost effective for water providers to implement. As such, implementation expectations are highly speculative. Further, many of the more cost effective measures have already been implemented. Implementation in the Metropolitan Water District Service area has already accounted for 17% of the 30% maximum potential offered as potential in the Pacific Institute's "Waste not Want Not" report, the source for much of this conservation potential estimate in the graph. Additional conservation measures will take time, funding and much effort to implement as most of the untapped measures rely on smaller incremental savings and changing human use patterns and preferences, a slow and uncertain process.

Conservation also has limits due to inability to move conserved supply from one place to another due to lack of Delta and other conveyance. In places facing a near total outage of supply in 2008, the fact that there is great long-term conservation potential on a statewide aggregate basis is cold comfort. That most urban areas are already relying on achievable levels of conservation to meet increasing demands (over 1 maf annually of conservation savings in the Metropolitan service area by 2020) due to population increases indicates conservation has a valuable, albeit limited, role and cannot substitute for actions necessary to restore base supplies now lost to regulatory actions related to Delta conveyance inadequacy. Growers in export areas of the SWP and CVP have nearly universally moved to micro-irrigation techniques for permanent and many annual crop types. Irrigation practices in areas not overlying useable ground water are generally already as efficient as agronomic conditions allow. Any increased irrigation efficiency in areas overlying useable ground water actually tends to diminish the effectiveness of area wide conjunctive use programs because of the loss of ground water recharge achieved when water passes through the root zone of the crop being irrigated and enters the aquifer. Additional conservation potential where water supply is nearly completely underpinned by exports from the Delta is inconsequential relative to shortages now looming in those areas.

Initial estimates show that up to 2.0 maf of annual supply of the State and Federal Projects may be lost to past regulatory restrictions and recent court actions to protect Delta smelt. Because of this, the conveyance bar in Figure 9 should now read between 1.6 and 3.0 maf of potential benefit.⁴ Even with the maximum potential of alternative supplies shown in this graph, a balance between supply and demand in the future is

⁴ Conveyance in itself does not provide yield. It merely allows access to stored supplies where yield is created. It can be thought of as a bridge between an origin and a destination. Without a bridge across whatever span, having a vehicle at the ready will do you little good.

impossible under currently constrained conveyance capability. Further, the potential for Conjunctive Management and Storage, the second largest source of supply in this chart, has been crippled due to conveyance restrictions. Without a Delta conveyance fix, few new conjunctive use opportunities south of the Delta are viable and \$4.3 billion in investment in nearly 6 maf of conjunctive use capacity in Kern County and the Metropolitan service area have been rendered nearly inoperable. Current constraints on Delta conveyance will not allow this storage to be refilled in all but the wettest years.

In sum, while this second draft vision document has promise in broad terms relative to improving water conveyance and storage infrastructure to the benefit of the environment and water supply for the State's economy, the many deficiencies noted above indicate a lack of internal consistency in the document and absence of policy or technical justification for many statements made. We look forward to a much improved third and final draft vision document.

Sincerely,

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